

AMENDMENTS TO THE CLAIMS

The listing of the claims will replace the previous version, and the listing of the claims:

LISTING OF THE CLAIMS

1. (currently amended) A construct for buildings comprising an elongated steel pipe member with a hollow interior and reinforcing elements provided in a hollow portion of the interior of the steel pipe member to cross the interior of the steel pipe member in ~~the~~ a longitudinal direction, said steel pipe member and said reinforcing elements being welded and joined together at a plurality of joint holes piercingly formed on an outer peripheral portion of said steel pipe member,

wherein said steel pipe member is formed with inserting holes for the reinforcing elements on the outer peripheral portion of the steel pipe member formed at mounting positions for said reinforcing elements to be of a width that meets a width dimension of the reinforcing elements,

wherein these inserting holes are provided to be successive from the outer peripheral surface of said steel pipe member to said interior,

wherein said reinforcing elements are inserted into said inserting holes from the outer peripheral surface of said steel pipe member towards a direction facing the interior of said steel pipe member in a direction that is substantially orthogonal to the longitudinal direction of the steel pipe member,

wherein said reinforcing elements are formed to be plate-like, to have side surfaces that are smaller than cross sections crossing the hollow portion in the interior of said steel pipe member, and to have an outer peripheral surface that is substantially orthogonal to the side surfaces and that corresponds to an inner wall surface of the steel pipe member,

wherein an engaging ~~elements~~ element for engaging with ~~an~~ suspending means ~~are~~ is provided on one side portion of said peripheral surface,

wherein the engaging elements of said reinforcing elements are provided to be parallel to the longitudinal direction of the outer peripheral surface of the reinforcing elements,

wherein engaging members for engaging ~~the~~ engaging elements of the suspending means are respectively provided on both side portions in the longitudinal direction,

wherein the engaging members comprise sloped surfaces that arise from above the outer peripheral ~~surfaces~~ surface of said reinforcing ~~elements~~ element and that respectively become broader in both outer directions in the longitudinal direction of the outer peripheral surfaces of said reinforcing ~~elements~~ element, and

wherein a shape that sections in a direction orthogonal to the longitudinal direction of the reinforcing ~~elements~~ element is formed on an upper portion of said engaging ~~elements~~ element to be triangular, arc-like or quadrangular.

2. (currently amended) A construct for buildings comprising an elongated steel pipe member with a hollow interior and reinforcing elements provided in a hollow portion of the interior of the steel pipe member to cross the interior of the steel pipe member in ~~the~~ a longitudinal direction, said steel pipe member and said reinforcing elements being welded and joined together at a plurality of joint holes piercingly formed on an outer peripheral portion of said steel pipe member,

wherein said steel pipe member is formed with inserting holes for the reinforcing elements on the outer peripheral portion of the steel pipe member formed at mounting positions for said reinforcing elements to be of a width that meets a width dimension of the reinforcing elements,

wherein these inserting holes are provided to be successive from the outer peripheral surface of said steel pipe member to said interior,

wherein said reinforcing elements are inserted into the inserting holes from the outer peripheral surface of said steel pipe member towards a direction facing the interior of the steel pipe member in a direction that is substantially orthogonal to the longitudinal direction of the steel pipe member,

wherein said reinforcing elements are formed to be plate-like, to have side surfaces that are smaller than cross sections crossing the hollow portion in the interior of the steel pipe member, and to have an outer peripheral surface that is substantially orthogonal to the side surfaces and that corresponds to an inner wall surface of said steel pipe member,

wherein an engaging ~~elements~~ element for engaging with ~~an~~ suspending means that ~~suspend~~ suspends the reinforcing elements ~~are~~ is provided on one side portion of said outer peripheral surface,

wherein projecting members corresponding to the joint holes piercingly formed on the outer peripheral portion of said steel pipe member are formed on the outer peripheral surface of said reinforcing ~~elements~~ element on a side opposite to the engaging ~~elements~~ element,

wherein the engaging elements of the reinforcing elements are provided to be parallel to the longitudinal direction of the outer peripheral ~~surface~~ surfaces of the reinforcing elements,

wherein engaging members for engaging ~~the~~ engaging elements of the suspending means are respectively provided on both side portions in the longitudinal direction,

wherein the engaging members comprise sloped surfaces that arise from above the outer peripheral ~~surfaces~~ surface of said reinforcing ~~elements~~ element and that respectively become broader in both outer directions in the longitudinal direction of the outer

peripheral ~~surfaces~~ surface of said reinforcing ~~elements~~ element,
and

wherein a shape that sections in a direction orthogonal to the longitudinal direction of the reinforcing ~~elements~~ element is formed on an upper portion of said engaging ~~elements~~ element to be triangular, arc-like or quadrangular.

3. (currently amended) A construct for buildings comprising an elongated steel pipe member with a hollow interior and reinforcing elements provided in a hollow portion of the interior of the steel pipe member to cross the interior of the steel pipe member in ~~the~~ a longitudinal direction, said steel pipe member and said reinforcing elements being welded and joined together at a plurality of joint holes piercingly formed on an outer peripheral portion of said steel pipe member,

wherein said steel pipe member is formed with inserting holes for the reinforcing elements on the outer peripheral portion of the steel pipe member formed at mounting positions for said reinforcing elements to be of a width that meets a width dimension of the reinforcing elements,

wherein these inserting holes are provided to be successive from the outer peripheral surface of said steel pipe member to said interior,

wherein said reinforcing elements are inserted into said inserting holes from the outer peripheral surface of said steel pipe member towards a direction facing the interior of said steel pipe member in a direction that is substantially orthogonal to the longitudinal direction of the steel pipe member,

wherein guiding elements are ~~inserted and fitted~~ prepared separately and provided in ~~to said~~ underneath joint holes piercingly formed on the outer peripheral portion of said steel pipe member,

wherein each of the guiding elements ~~comprise~~ comprises stopping members that abut inner walls of said joint ~~holes~~ hole and guide members that ~~are prolonged by~~ extend from the stopping members and that jut into a space portion of said steel pipe member, and

wherein the guide members comprise sloped surfaces that expand to both sides with respect to a length direction of said steel pipe member with said joint holes so that a ~~being pinched between and along which~~ lower end edge portion ~~portions of the outer peripheral surfaces~~ of the reinforcing elements ~~may slide~~ element enters.

4. (currently amended) The construct for buildings as claimed in Claim 1, wherein a plurality of reinforcing elements ~~are~~ is provided in the interior of the steel pipe member at intervals with a reinforcing filler that solidifies after injection, said filler being ~~is filled into~~ in a space ~~portions~~ portion formed between the reinforcing elements.

5. (currently amended) The construct for buildings as claimed in Claim 1, wherein the steel pipe member provided with the reinforcing elements in its interior is either a pillar element erected such that its longitudinal direction becomes a direction vertical to a horizontal surface or a beam element that becomes either horizontal or oblique when mounted to a building.

6. (currently amended) The construct for buildings as claimed in Claim 1, wherein the steel pipe member provided with the reinforcing elements in its interior is a pillar element erected such that its longitudinal direction becomes a direction vertical to a horizontal surface, and

wherein connecting members to be joined with end portions of beam elements of a building are welded and joined to welded joint

areas at which said steel pipe member and said reinforcing elements are welded and joined.

7. (currently amended) A method for manufacturing a construct for buildings, wherein in a construct for buildings comprising an elongated steel pipe member with a hollow interior and reinforcing elements provided in a hollow portion of the interior of the steel pipe member to cross the interior of the steel pipe member in ~~the~~ a longitudinal direction, said steel pipe member and said reinforcing elements ~~being~~ are welded and joined together at a plurality of joint holes piercingly formed on an outer peripheral portion of said steel pipe member,

wherein inserting holes are piercingly formed at mounting positions for said reinforcing elements on the outer peripheral portion of said steel pipe member and the steel pipe member is mounted in a substantially horizontal manner such that said inserting holes face upward,

wherein engaging elements ~~piereingly~~ formed on upper portions of the reinforcing elements are suspended by a suspending means above ~~of~~ the inserting holes such that outer peripheral portions that comprise width directions of the reinforcing elements face downward, the reinforcing elements being descended into the inserting holes by dropping the same in a vertical manner through ~~the~~ own weight of the reinforcing members and inserted in a direction substantially orthogonal to the longitudinal direction of the steel pipe member from the outer peripheral surface of said steel pipe member towards the interior of said steel pipe member,

wherein downside outer peripheral surfaces of said reinforcing elements are supported and received by a lower inner surface of the hollow portion of said steel pipe member such that the outer peripheral surfaces on both side portions of the reinforcing

elements correspond to ~~the~~ inner side ~~surface~~ surfaces of the hollow portion of the steel pipe member, and

wherein said steel pipe member and the outer peripheral portions of said reinforcing elements are welded and joined to become integral at the inserting holes and said plurality of joint holes.

8. (currently amended) A method for manufacturing the construct for buildings as claimed in Claim 7, wherein in suspending the reinforcing elements through a the suspending means,

engaging elements for the reinforcing elements are provided to be parallel to the longitudinal direction of outer peripheral surfaces of the reinforcing elements; wherein engaging members for engaging with the suspending means are provided on both side portions of the longitudinal direction; the engaging members ~~comprising~~ comprise sloped surfaces that arise from above the outer peripheral surfaces of said reinforcing elements and that respectively become broader in both outer directions in the longitudinal direction of the outer peripheral surfaces of said reinforcing elements, and wherein a shape that sections in a direction orthogonal to the longitudinal direction of said reinforcing ~~elements~~ element is formed on an upper portion of said engaging elements to be triangular, arc-like or quadrangular,

wherein projecting members corresponding to joint holes piercingly formed on the outer peripheral portion of the steel pipe member are provided at a lower ~~portion~~ portions of the engaging elements of said reinforcing elements, the projecting members being formed such that a shape that sections in a direction orthogonal to the longitudinal direction of said reinforcing ~~elements~~ element is formed to be triangular, arc-like or quadrangular,

wherein when the engaging members of the engaging elements of said reinforcing elements are grasped by said suspending means,

said reinforcing elements are lifted upward by their sloped surfaces and wherein the reinforcing elements are supported and received in vertical conditions with upper portions of the engaging elements engaging with pressing members of said suspending means for receiving compressive load, and

wherein when the projecting members of said reinforcing elements are positioned at the joint holes, outside surfaces of the projecting members formed to be triangular, arc-like or quadratic are guided while abutting peripheral edges of said joint holes to be inserted therein while correcting postures of the reinforcing elements in vertical directions.